airwaves

Wisia Wedzicha, *Editor in Chief*

QUALITY CONTROL OF HOME VENTILATION

With the availability of non-invasive ventilation, there has been an increase in the treatment of patients at home with home ventilation. A recent European Union Concerted Action study estimated that there were around 21 500 patients on home ventilatory support in Europe, but that there was marked variation in quality control of the equipment between countries. In this month's *Thorax* Farré and colleagues describe a survey of the performance of equipment in 300 patients using home ventilation in Barcelona, Spain. Differences were found between actual, set, and prescribed values of the ventilator variables which may reflect inadequate documentation of changes or user changes. The authors also describe underperformance of ventilator alarms. However, the number of non-programmed hospital admissions was not related to an index reflecting ventilator error. This index was also greater where home ventilation started earlier, and the authors conclude that the problems encountered in the study were an indication of poor quality control at the ventilator centres. In the accompanying editorial, Simonds describes issues relating to the risk of home ventilation that is essential reading for any of us involved in the care of these patients. She concludes that it is important to explain carefully the risks to patients and their carers, but patients will usually be prepared to accept these risks as home care is preferable to long term hospital care.

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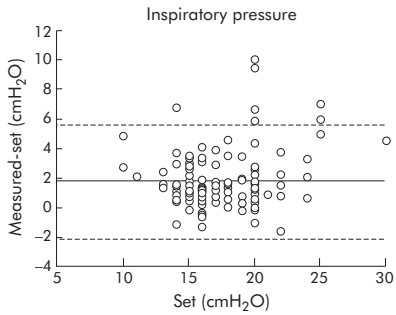

Comparison between actual generated inspiratory pressure and inspiratory set pressure in pressure preset ventilators. The differences between the two values in each case are plotted as a function of the set values.

TRICKY PROBLEM OF HOME OXYGEN IN SMOKERS

I recommend to our *Thorax* readers the editorial by Lacasse and colleagues reflecting on the problems of home oxygen prescription in cigarette smokers. This article was precipitated by two deaths from burns and inhalation therapy in the authors' home care programme of patients on long term oxygen therapy (LTOT). As the authors rightly point out, previous guidance on the issue of smokers and home oxygen therapy has been vague; smokers were included in the two landmark oxygen trials and there is no reliable evidence that smokers on LTOT have worse outcomes than non-smokers. They suggest that the advantages of the treatment must be balanced against the risks, and that home oxygen should be avoided for indications where the evidence base is not strong. This is particularly pertinent in the UK where there are large numbers of patients at home without formal assessment on short burst oxygen therapy for which there is no reliable evidence of benefit. A significant proportion of these may be smokers and thus at risk from burns. We must all work towards ensuring that home oxygen is provided only after appropriate assessment for the right indications.

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COUGH IN CYSTIC FIBROSIS

As Smith and colleagues point out in this issue of *Thorax*, there is little available information on cough frequency in adults with cystic fibrosis, yet it is a common symptom especially during exacerbations. The authors performed quantitative measurements of cough when cystic fibrosis patients were hospitalised during an exacerbation. They show that the cough rate significantly decreased with treatment of the exacerbation, with lung function, sputum volume, and systemic C-reactive protein levels influencing the cough rate. There were also variations in daytime and nocturnal cough.

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MORE FRUIT FOR ASTHMATICS

The marked differences in the prevalence of asthma between countries have highlighted the importance of environmental factors in asthma, and dietary antioxidants have been implicated. However, it is unlikely that each of these nutrients is independently associated, and asthma may be associated with less healthy diets. In this month's *Thorax* Patel and colleagues describe a nested case-control study in Norfolk, UK on diet and asthma. The results show that asthma is associated with a low intake of fruit, vitamin C and manganese, and also with low levels of vitamin C. We need to understand more about diet and manganese, but these results have important public health implications.

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STEROID THERAPY AND ADRENAL INSUFFICIENCY

Although there is an association between oral corticosteroid therapy and adrenal insufficiency, the magnitude of the risk has not been determined and nor has the risk with inhaled corticosteroids. Mortimer and colleagues describe a case-control study to assess the risk of adrenal insufficiency with steroid therapy and show that people prescribed both oral and inhaled steroids have a dose related increase in adrenal insufficiency, although the overall size of the risk is small. The increased risk in patients taking inhaled steroids may be due to concomitant exposure to oral steroids, although the authors could not exclude the possibility of an effect of higher doses of inhaled corticosteroids on adrenal insufficiency.

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